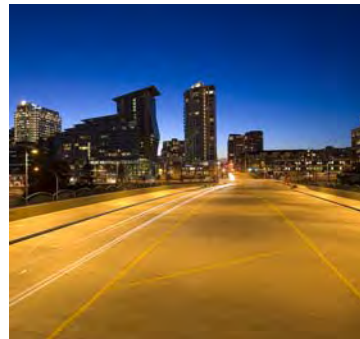
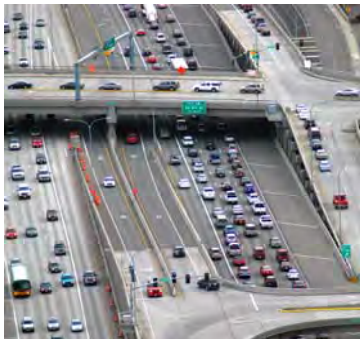
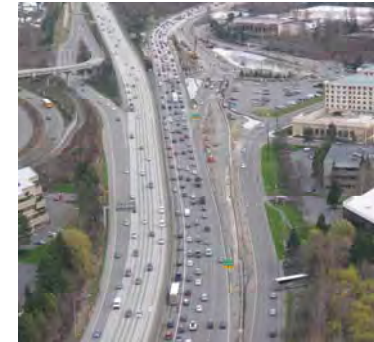


I-405/SR 167 Corridor Executive Advisory Group

Meeting #3



I-405/SR 167 Executive Advisory Group
Renton Community Center, Renton, Wash.
September 19, 2013

Welcome and Introductions

Craig Stone

Assistant Secretary, Toll Division



Washington State
Department of Transportation

Agenda

- Welcome/Introductions
- Review key study elements
- Review of carpool scenarios
- Focus group results
- Net Revenue Update
- Funding and Phasing Strategies
- Review carpool scenario summary
- EAG discussion
- Public comment

Key Study Elements



- Phasing: What is the timing/schedule to complete the 40-mile system?
 - Do we open Renton to Bellevue and I-405/SR 167 Direct Connector as one system/at the same time?
- Phasing: Are there other projects, as identified in the I-405 Master Plan that need to be advanced?
- Funding: What are the strategies for financing capital improvements for the 40-mile system?
 - Legislative study requirements:*
 - Current state and federal funding contributions for I-405 and SR 167 corridor projects;
 - A potential future state or federal funding contribution to supplement toll funding; and
 - A toll funding contribution by borrowing against future toll revenues, optimizing the toll funding “available for capacity improvements including, but not limited to, using the full faith and credit of the state.”
- Funding: Do we have a 2+ to 3+ carpool transition plan? *Carpool policy: How does changing the carpool definition affect the following:*
 - Financing
 - Performance
 - Public acceptance
 - Timing
 - Federal requirements (MAP 21)

Review of Carpool Scenarios

Kim Henry

I-405/SR 167 Program Director, WSDOT



Washington State
Department of Transportation

Carpool scenarios

Bookends

- 3+ carpool free
- 2+ carpool free

Transition options

- 3+ carpool free peak / 2+ carpool free off-peak
- Carpool discount

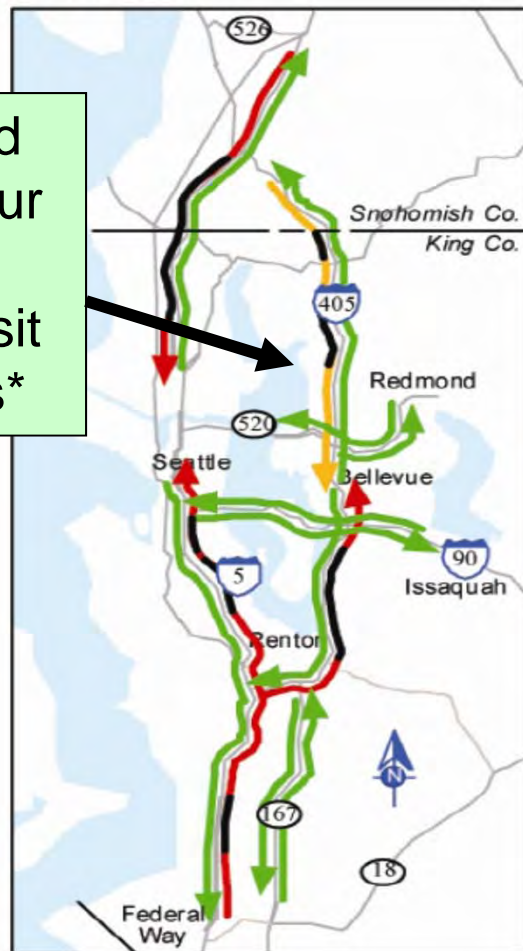
Impact of HOV Congestion on Transit

AM Peak Period

PM Peak Period

Southbound

- 15 trips/hour
- 9 routes
- 2,900 transit passengers*



Northbound

- 11 trips/hour
- 9 routes
- 2,600 transit passengers*








— Congested segments





































Carpool policy issues to consider

- **System Reliability / Operations**
 - Will it manage congestion, maintain reliable speeds, and provide a choice to drivers?
- **Toll Rates**
 - Can traffic be managed effectively?
- **Net Revenue**
 - Will it help pay for completing the 40-mile system?
- **Public Acceptance**
 - Will the public (current HOV users, new toll customers, and stakeholders) support it?
- **Usability**
 - Is it simple to understand and easy to use?
- **Enforcement**
 - Can it be enforced credibly?
- **Regional operations/Future decision**
 - Does it work system wide; will the decision need to be revisited?

Comparison of Scenarios – Meeting 2, Feb. 27, 2013

	A.  2+ Carpool Free	B.  3+ Carpool Discount	C.  3+ Peak Free  2+ Off-Peak Free	D.  3+ Carpool Free
System reliability/Operations	ETL overcrowded; Doesn't meet MAP 21 or EHB 1382 requirements	ETL managed to allow maximum throughput; Meets MAP 21 and EHB 1382	ETL managed to allow maximum throughput; Meets MAP 21 and EHB 1382	ETL managed to allow maximum throughput; Meets MAP 21 and EHB 1382
Toll Rates/Pricing	Less buy-in opportunity, so toll rates are higher; 200 days/year HOV only	Rates are low with more buy-in opportunity, more people at lower rates	Rates are low with more buy-in opportunity, more people at lower rates	Rates are low with more buy-in opportunity, more people at lower rates
Initial Net Revenue	Doesn't meet two-year revenue requirements; low revenue	May not meet two-year revenue requirements; depends on discount; long-term high revenue	May meet two-year revenue requirements; similar to 3+ carpool; long-term high revenue	Should meet two-year revenue requirements; long-term high revenue
Public acceptance	Easy – Early acceptance but decreasing benefits in future	Hard – all carpools pay (3+ and 2+); no free rides during congested times; prices will increase over time	Somewhat easy – Requires education as to benefit during peak, but 2+ can still get free ride during off-peak hours	Hard – initial acceptance hard but benefits better understood over time
Usability	Easy to understand – Consistent throughout the day	Somewhat easy to understand – Consistent throughout the day	Somewhat easy to understand	Easy to understand – Consistent throughout the day
Enforcement	Somewhat easy – Large number of carpools to monitor but easier to detect	Somewhat easy – Large number of carpools to monitor but easier to detect	Somewhat hard - Harder to detect during peak but smaller number to check; transition period issues	Somewhat hard – Harder to detect but smaller number to check
Regional operations/Future decision	Not effective regional solution; does not address performance	Regional solution; potentially no future decision needed	Harder to apply consistently on a regional basis; may require future change in peak period definitions	Regional solution; no future decisions needed

Comparison of Scenarios – Meeting 2, Feb. 27, 2013

 Good/ Easy  Ok/ Somewhat easy/hard  Poor/ Hard	A.  Carpool Free	B.  Carpool Discount	C.  Peak Free  Off-Peak Free	D.  Carpool Free
System reliability/ Operations				
Toll Rates/Pricing				
Initial Net Revenue				
Public acceptance				
Usability				
Enforcement				
Regional operations/Future decision				

2013 Focus Group Results

**Bruce Brown & Katherine Schomer
PRR, Inc.**



What we will present

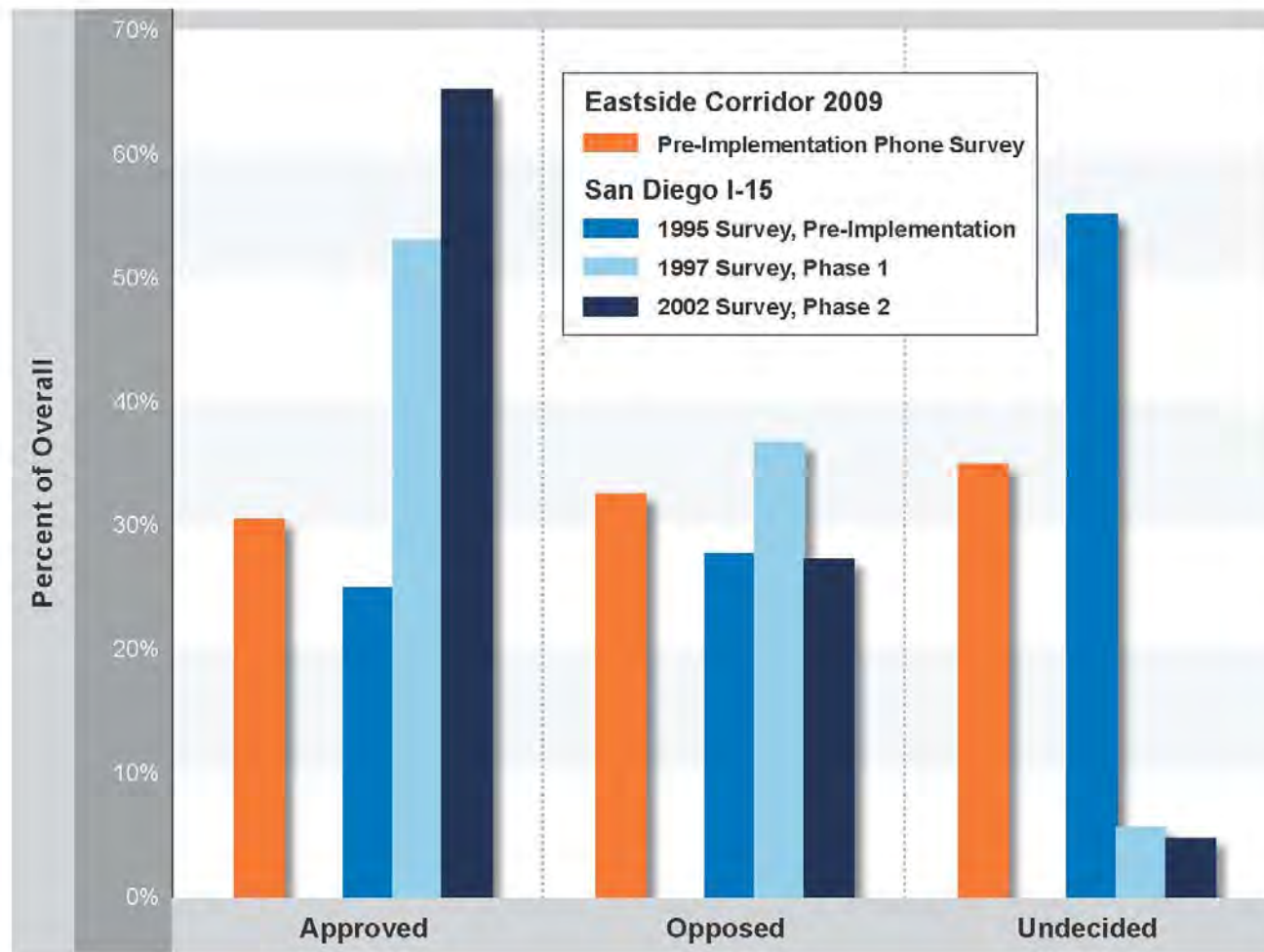
- Summarize results from 2009 I-405 Express Toll Lane (ETL) study
- Results from current focus group study of carpool option preferences in express toll lanes on I-405
 - Methodology
 - Participant travel behaviors
 - Preferences for carpool options
 - Summary and key learnings

What we found in 2009

- **Use = Support.** Individuals with previous experiences using HOT lanes on SR 167 were more likely to support the idea of express toll lanes.
- **Congestion relief = Willingness to pay.** Participants who had used HOT lanes were willing to pay to travel faster on I-405.
- **Understanding = Support.** People who understood the benefits of express toll lanes tended to support them.
- **Undecided = Opportunity.** People who do not yet know the benefits of express toll lanes, present an opportunity to alleviate their concerns through further information.
- **Dislike of tolls = Non-supporters.** People who disliked the idea of tolling under most or all circumstances were thought to be unlikely to become supporters.



Public support for tolled lanes increases after implementation



2013 Focus Group Methodology

- Four focus groups
 - Group 1 – Good To Go! Account Holders
 - Group 2 – General I-405 and SR 167 Users
 - Group 3 – I-405 Carpoolers/Vanpoolers/Transit
 - Group 4 – SR 167 Carpoolers/Vanpoolers/Transit
- Each group lasted two hours and each had eight participants.
- Groups had a mix of gender, age, race, income, and home locations.
- Group one was held in Seattle, and all other groups were held in Bellevue.

Current Travel Behaviors

- *Good to Go!* account holders
 - Traveled 1-2 days in last week on I-405, a few traveled on SR 167
 - Only two participants had actually used their *Good to Go!* passes in the last week.
- General I-405 and SR 167 Users
 - Mostly traveled 2-3 days in last week on I-405, and two had traveled on SR 167
 - No one had a *Good to Go!* pass
- Carpoolers on I-405
 - Traveled on I-405 3-7 days in last week, and 3 had also traveled on SR 167
 - Most participants carpool 2-3 days a week in off-peak times with family and friends
 - A few had *Good to Go!* passes and used them occasionally on SR 520
 - Two participants had used vanpools and transit frequently on I-405
- Carpoolers on SR 167
 - Traveled on SR 167 2-7 days in last week, and many also traveled on I-405 3-7 days
 - About one-third carpooled with non-family/friends during peak times, while others carpooled with family and friends in off-peak times
 - Only one participant had a *Good to Go!* pass and no one used transit or vanpool options.

Thoughts on Carpool Lane Congestion

- Most of the participants agreed that during afternoon peak travel times on I-405:
 - Carpool lanes were not as fast as they expected them to be,
 - Not reliable for a faster trip, and
 - Sometimes as slow as general purpose lanes.
- Most of the participants agreed during morning peak travel times, I-405 carpool lanes were slightly more reliable for providing a faster trip.
- SR 167 carpoolers thought that HOT lanes on SR 167 are more reliable than carpool lanes on I-405.



“It is easier than not being in the carpool lane, but not good either.”


“There is always something on the 405, better off in the carpool lane but not necessarily quicker.”

Carpool Options Presented

- 3+ Carpool Free
- 3+ Free Peak, 2+ Free Off-peak
- All Carpool Discount

3+ Carpool Free

- When presented with the option to go to 3+ free carpools - 4 out of 32 total participants were supportive due to the revenue benefit in getting projects completed quicker.
- Most participants believe there should be some benefit to forming 2-person carpools.
- The major concern is that many people will not be able to form a 3+ person carpool.
- Many were worried about the affect on future 2-person carpooling.
- However, those who used SR 167 HOT lanes were likely to chose this option as their second most preferred option.


EXPRESS TOLL LANES	
 522	\$2.00
NE 124 th ST	\$2.15
NE 6 th ST	\$2.35
3+ Required for Carpool	


"We are already carpooling as much as we can, don't know how we can find another person."

"To help pay for roads, this is a good idea if you can find enough people to be a 3+ person carpool."

3+ Carpool Free Peak / 2+ Carpool Free Off-peak

- About a third (11 out of 32) of the participants preferred this option.
 - This option provides a time (off-peak) when 2-person carpooling is free, rather than a discount all hours.
 - Provides encouragement to form 3-person carpools which is better for congestion (but also provides a free option for 2-person carpools during some periods).
 - This option was particularly preferred by SR 167 carpool users.
- Half of the participants listed 3+ Carpool Free Peak / 2+ Carpool Free Off-peak as their second most preferred carpool option.
- Participants who do not prefer this option want more of a benefit to 2-person carpools all the time.

EXPRESS TOLL LANES	
 522	\$2.00
NE 124 th ST	\$2.15
NE 6 th ST	\$2.35
3+ free 5 a.m. - 10 a.m.	

EXPRESS TOLL LANES	
 522	\$0.75
NE 124 th ST	\$0.75
NE 6 th ST	\$0.75
2+ free 10 a.m. - 3 p.m.	

“This option seems to suit what everyone wants most.”

“Based on statistics given and goals it is the best match, it encourages solo drivers to rethink driving during peak times.”

All Carpool Discount - \$1.00

- About half (17 out of 32) of the participants preferred the All Carpool Discount option.
 - This option provides the most benefit to 2-person carpools during peak periods.
 - Provides more encouragement to carpool.
 - Does not change the definition of carpooling.
- SR 167 carpool users did not like this option because it is confusing and does not provide a “free” option/incentive to carpooling.

EXPRESS TOLL LANES	
 522	\$2.00
NE 124 th ST	\$2.15
NE 6 TH ST	\$2.35
Carpool \$1.00 discount	

EXPRESS TOLL LANES	
 900	\$0.75
 I-90	\$1.80
NE 6 TH ST	\$3.20
Carpool \$1.00 discount	

“This option is less discouraging for carpools.”

“This option is the most equitable and most benefit to carpools.”

Summary and Key Findings

- Participants want some advantage for 2-person carpools.
 - Half most preferred All Carpool Discount option with \$1 discount for both 2-person and 3+ person carpools.
 - A third of participants most preferred 3+ Carpool Free Peak / 2+ Carpool Free Off-peak. Half of the participants prefer this option as their second choice.
- Some participants like the idea of generating more revenue quickly, but most believe not at the expense of 2-person carpools.
- Participants who have experience with the SR 167 HOT lanes are more inclined to prefer the 3+ Carpool Free Peak / 2+ Carpool Free Off-peak, and prefer 3+ Carpool Free as their second choice.
 - These participants more clearly understand the advantages of the express toll lanes, and prefer having some type of “free” option for carpoolers (both 3+ and 2-person).

Net Revenue and Financial Analysis Review

Brent Baker
Vice President
Parsons Brinckerhoff

Our direction from RCW 47.56.880

(as amended by EHB 1382 in 2011)

(4) The department shall monitor the express toll lanes project and shall annually report to the transportation commission and the legislature on the impacts from the project on the following performance measures:

- (a) Whether the express toll lanes maintain speeds of forty-five miles per hour at least ninety percent of the time during peak periods;
- (b) Whether the average traffic speed changed in the general purpose lanes;
- (c) Whether transit ridership changed;
- (d) Whether the actual use of the express toll lanes is consistent with the projected use;
- (e) Whether the express toll lanes generated sufficient revenue to pay for all Interstate 405 express toll lane-related operating costs;**
- (f) Whether travel times and volumes have increased or decreased on adjacent local streets and state highways; and
- (g) Whether the actual gross revenues are consistent with projected gross revenues as identified in the fiscal note for Engrossed House Bill No. 1382 distributed by the office of financial management on March 15, 2011.

(5) If after two years of operation of the express toll lanes on Interstate 405 performance measures listed in subsection (4)(a) and (e) of this section are not being met, the express toll lanes project must be terminated as soon as practicable.

Early Year Net Revenue Projections

Millions of Dollars — Assumes Renton to Bellevue Opens 1/1/2022

Fiscal Year	Scenario A — 2+ Carpool Free Photo Tolling*				Scenario B — \$1.00 Carpool Discount*				Scenario B-2 — \$0.50 Carpool Discount Photo Tolling*			
	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)
2016	2.8	2.6	(5.0)	(2.4)	3.9	3.3	(6.2)	(2.8)	6.9	6.4	(5.9)	0.4
2017	4.7	4.3	(6.4)	(2.1)	5.3	4.5	(6.9)	(2.4)	9.3	8.5	(6.7)	1.8
2018	5.6	5.2	(7.1)	(2.0)	6.3	5.3	(7.4)	(2.1)	11.2	10.3	(7.6)	2.7
2019	6.1	5.6	(7.3)	(1.7)	7.0	6.0	(7.8)	(1.8)	13.5	12.5	(8.5)	4.0
2020	6.6	6.1	(7.6)	(1.5)	7.9	6.7	(8.3)	(1.6)	16.3	15.0	(9.6)	5.4
2021	7.2	6.6	(8.0)	(1.4)	8.9	7.5	(9.0)	(1.5)	19.6	18.0	(11.1)	7.0
2022	22.0	20.2	(19.4)	0.9	35.7	30.4	(19.1)	11.3	46.5	42.7	(22.5)	20.2
2023	44.1	40.5	(27.5)	13.0	77.7	66.0	(25.9)	40.1	88.4	81.3	(30.5)	50.8

Fiscal Year	Scenario C — 2+ Carpool Free Off-Peak 3+ Carpool Free Peak Photo Tolling*				Scenario D — 3+ Carpool Free Photo Tolling*				Scenario F — 3+ Carpool Free (WSTC Independent Forecast)†			
	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)
2016	4.9	4.5	(5.0)	(0.5)	5.3	4.9	(4.6)	0.3	6.3	5.4	(3.9)	1.4
2017	8.2	7.6	(6.4)	1.2	9.0	8.3	(5.8)	2.5	8.7	7.4	(4.0)	3.3
2018	9.9	9.1	(7.1)	2.1	10.8	9.9	(6.4)	3.5	11.9	10.1	(4.4)	5.7
2019	10.8	10.0	(7.2)	2.8	11.7	10.8	(6.5)	4.3	13.8	11.7	(4.7)	7.0
2020	11.8	10.8	(7.4)	3.4	12.6	11.6	(6.7)	4.9	15.7	13.3	(5.1)	8.3
2021	12.8	11.7	(7.8)	3.9	13.6	12.5	(7.1)	5.5	17.7	15.1	(5.6)	9.5
2022	40.8	37.5	(19.8)	17.7	44.2	40.5	(19.3)	21.2	54.9	46.7	(20.9)	25.8
2023	83.7	76.9	(28.7)	48.2	91.1	83.7	(28.3)	55.4	101.8	86.5	(23.0)	63.5

NOTES:

* CDM Smith traffic and revenue projections.

† Cambridge Systematics "50th Percentile" traffic and revenue projections.

¹ Year of collection dollars.

² Adjusted for potential uncollectible revenue.

³ Includes facility O&M costs starting in FY 2022, plus toll collection costs and credit card fees in all years.

Revised 9/18/13

○ Meets revenue requirement in EHB 1382

○ Does not meet EHB 1382 revenue requirement

Bellevue to Lynnwood Initial Results

- First three years of traffic reflect ramp-up
 - Initial usage is lower while customers test options and become accustomed to the lanes
- In order to meet Legislative requirement for positive net revenue by the end of the second year, free trips must be limited
- Options
 - All carpools pay a discounted toll at all times (Scenario B-2) **< or >**
 - 2-person carpools pay a toll at least during peak times (Scenarios C and D)

40-mile System Revenue Projections

- Bellevue to Lynnwood – Phase 1 of Express Toll Lanes has lower revenue potential
 - 17-mile system generates less demand than 40-mile system
 - Peak demand occurs primarily in one direction
- Renton to Bellevue – Phase 2 has much higher revenue potential
 - Peak demand occurs in both travel directions
 - Overall corridor demand is higher for complete 40-mile system

Express Toll Lane Financing Challenges

- Express toll lane usage is hard to forecast
 - Sensitive to small changes to adjacent general purpose lane performance
 - Driver choice to use lanes is sensitive to the price, may change from day to day
- Limited national market experience financing express toll lane projects
- Financial assumptions/analysis will be conservative until the financial industry gains more experience resulting in:
 - Higher debt service coverage ratios
 - Higher interest rates
 - Discounting of revenue projections

Potential Toll Funding Contribution

- WSDOT worked with the Office of the State Treasurer (OST) to assess and evaluate toll funding options
- The financial capacity of future toll revenues was analyzed to quantify the potential construction funding contribution
- Two debt structures were considered:
 - Stand-alone Toll Revenue Bonds
 - Toll Backed General Obligation Bonds
- OST expressed concerns about the viability of express toll lanes financing in today's market

Hypothetical Debt Structures Tested

- Stand-alone Toll Revenue Bonds
 - Tolls are the only source of funds pledged to debt repayment
 - Traffic and revenue risk is borne by the investors
 - Higher investor risk = higher cost credit / less funding
- Toll-Backed General Obligation Bonds
 - The state pledges to repay the debt with other sources (e.g., motor vehicle fuel tax funds) should toll revenues be insufficient
 - The state retains traffic and revenue risk
 - Lower investor risk = lower cost credit / more funding

Financing Assumptions

- Conservative assumptions are warranted due to limited market experience and uncertainty in revenue projections

Assumption	Toll Revenue Bonds	Toll-backed GO Bonds ¹
Credit rating	BBB	AA+
Interest rates	7.50 – 7.85%	5.50 - 6.00%
Debt service coverage	2.5x	2.0x; 1.3x
R&R costs	Funded from tolls ahead of debt service ²	Funded from tolls ahead of debt service ²
Debt service profile	Ascending	Ascending; Ascending + level after 2031
Start of Tolling	Delayed one year to 1/1/23	Delayed one year to 1/1/23
Years Funding Provided	FY 2017-22	FY 2017-22

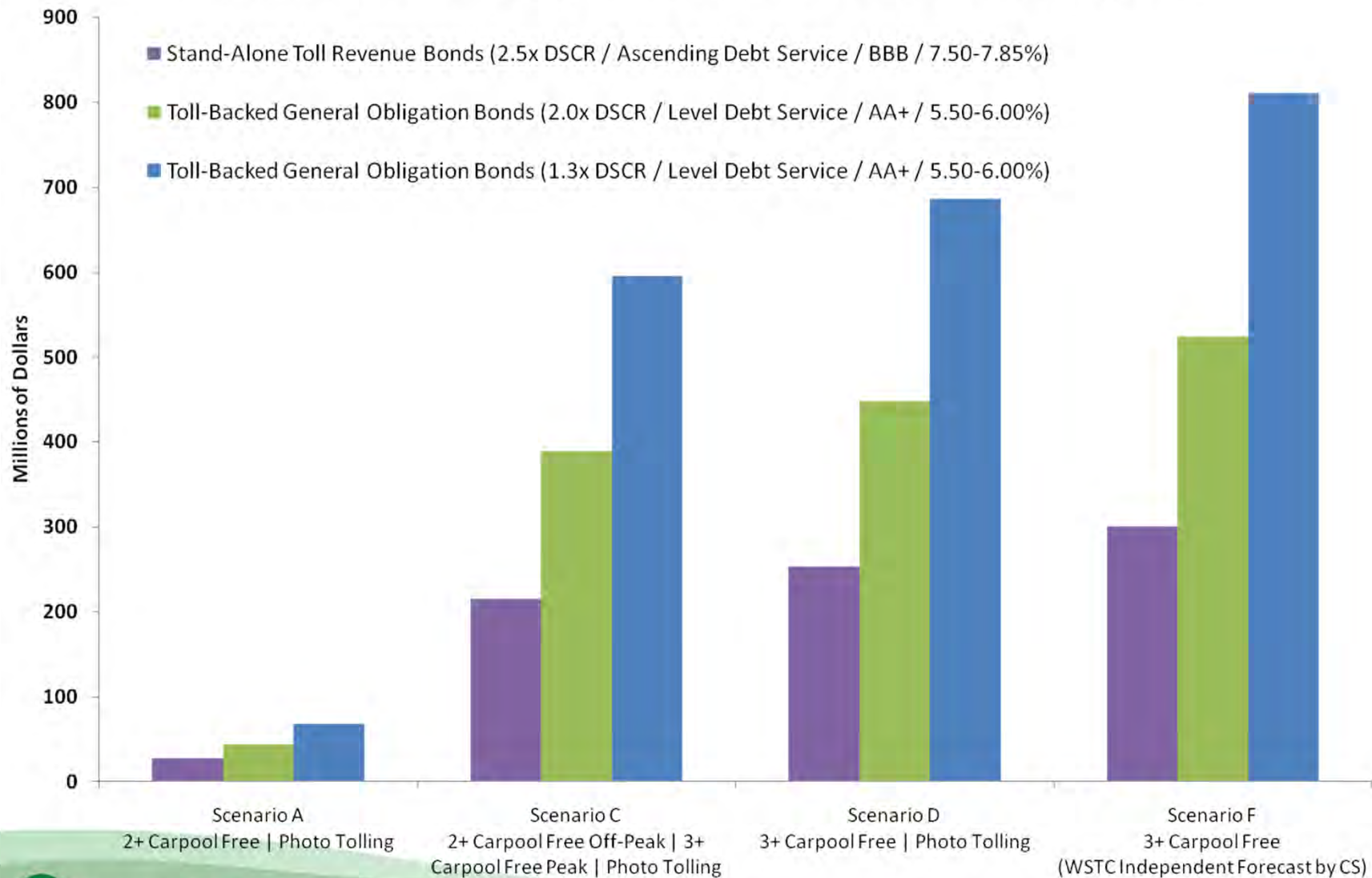
¹ OST tested paying for R&R both with and without a pre-funded reserve account and found that the difference in financial capacity was negligible, since in both cases, tolls paid for R&R in advance of debt service.

² Assumptions would also apply to triple pledge debt in which tolls are the first pledge, followed by motor vehicle fuel taxes as the second pledge, and finally, the full faith and credit of the state.

Source: Office of the State Treasurer

Hypothetical Toll Funding Ranges

Potential Toll Funding by Toll Scenario and Debt Structure Option



Preliminary Findings

- OST has expressed concern that stand-alone toll revenue bonds are not viable at this time due to the high level of risk. Toll backed GO bonds would likely need to draw on traditional (MVFT) revenues.
- OST estimates toll revenues are insufficient to fully finance construction of the \$1.2 B Renton to Bellevue express toll lanes project under any toll or financing scenario. And interest rates have risen by more than 1.25 percentage points since the analysis was conducted in April.
- OST notes toll revenues will be limited until the Renton to Bellevue extension opens (FY 2022) and are vulnerable to construction delays
- Nationwide, express toll lane toll revenue bond financing is limited.
 - SR 91, Riverside County, CA — public toll bond financing backed by tolls only, TIFIA loan, other non-toll funding sources
 - I-10, TX — public toll bond financing with pooled, system revenues
 - I-495, VA — public-private partnership with private activity toll bonds, TIFIA loan, other non-toll funding sources

Preliminary Findings

- Experience from a functioning Bellevue to Lynnwood express toll lane system will provide valuable information about the predictability, volatility, and reliability of express toll lane revenues
- Level debt service structuring for the outer forecast years reduces financing risks
- A TIFIA loan may be an option for partial financing:
 - The program was designed for projects in need of credit enhancement
 - Recent tightening of credit quality requirements for TIFIA applicants may reduce the potential benefits of a TIFIA loan
- The State should identify other funding sources to rely less on express toll lane revenues financed for up-front construction and more for:
 - Pay-as-you-go capital expenditures to complete the 40-mile system
 - Ongoing system operating expenses

How could we fund and phase the project?

Denise Cieri

I-405/SR 167 Program Deputy Director, WSDOT

Next Priority Projects



Completing the 40-mile system

Future I-405 Corridor priorities

Projects on other corridors with direct benefits to I-405 (system to system connections)

A. Tukwila to Bellevue - \$1,353* million (WSDOT: \$1,215 m; others: \$138 m)

Benefits	Renton to Bellevue (Option 4)	\$890	• Adds one lane in each direction
• Benefit/Cost: 4.7			
• Approximately 30,000 vehicle hours of delay reduced every day which equates to \$276 M in annual travel time savings by drivers.	SR 167 Direct Connector	\$325 (\$40M in FE/RW funded)	• Builds a flyover ramp connecting the I-405 express toll lanes to the SR 167 HOT lanes.
	Sound Transit: N 8th St Direct Access	\$78*	• Builds a direct access ramp at N. 8th St.
	City of Bellevue: NE 6th St Extension Bellevue Share	\$60*	• Extends NE 6th St. east across I-405 to 120th Ave. NE.

B. SR 167 Express Toll Lanes Extension - \$117 million

Benefits	Stage 4 (SB)	\$82 (Funded)	• Extends the existing southbound HOT lane to the King / Pierce County line.
• Benefit/Cost: 2.3			
• Increases capacity over 30% and extends the reliability and traffic benefits of the SR 167 HOT lanes.	Stage 5 (NB)	\$35	• Starts the northbound HOT lane at the King/Pierce County.

C. Bothell to Lynnwood Dual Express toll Lanes - \$570 million

Benefits	SR 522 Interchange	\$315	• Builds a new direct access connection to SR 522 and redesigns a new interchange.
• Benefit/Cost: 1.7			• Replaces the northbound I-405 bridge over the Sammamish River and SR 522.
• 36,000 vehicle hours of delay reduced every day (\$211 M annual travel time savings). Provides a new direct access connection between SR 522 and I-405 express toll lanes eliminating weaving and improving operations for the general purpose lanes.	SR 522 to I-5 Dual Express Toll Lanes	\$255	• Adds a new lane in each direction between SR 522 and I-5 in Lynnwood to be paired with the existing HOT lane to form a dual express toll lane system.

D. SR 167 Stage 6 - \$300 m

• Benefit/Cost: 2.5			• Extends the SR 167 HOT lanes northbound and southbound to SR 410 / SR 512 interchange.
• Reduces vehicle delay by 32,000 vehicles daily.	SR 167 Stage 6	\$300m	
• Project connects regional facilities of SR 410, SR 512, and future SR 167 extension.			

E. I-405/NE 132nd St. Interchange - Prior TPA project commitment

Benefits			• Builds a new half-diamond interchange at NE 132nd St. in Kirkland.
• Benefit/Cost: 1.1			
• Provides new access to and from north Kirkland area and complements 116th interchange which has recently been rebuilt.	NE 132nd St. Interchange	\$75	

F. I-90/I-405 Interchange Direct Connectors - \$535 million

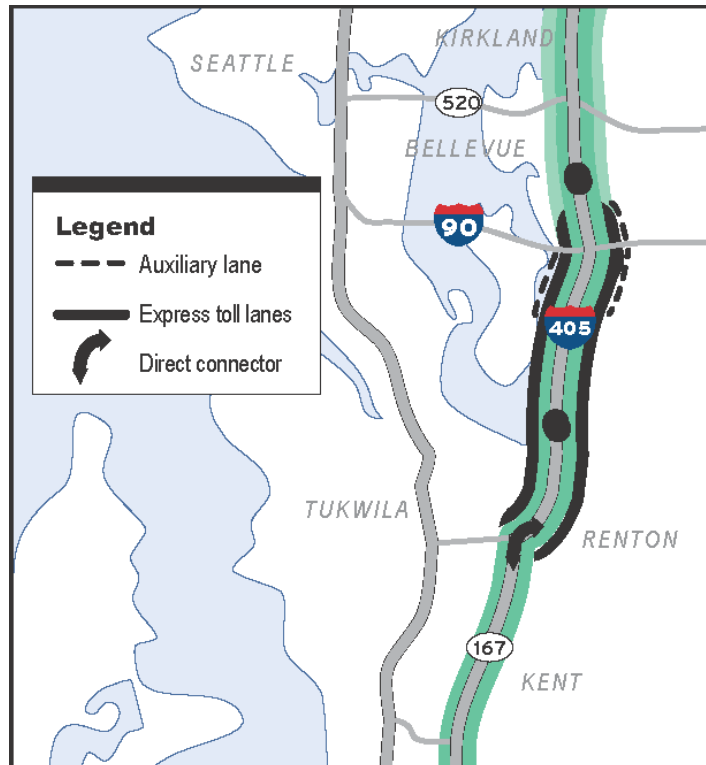
Benefits	I-405 / I-90 Renton to Issaquah Direct Connector	\$270	• Builds a new flyover ramp between the express toll lanes on I-405 and the HOV lanes on I-90.
• Benefit/Cost: 1.6			• The ramp would connect Renton to Issaquah.
• Reduces delay by 22,000 vehicle hours of \$112M in annual travel time savings. Reduces weaving and provides high speed reliable trips between the two interstate systems.	I-405 / I-90 Bellevue to Issaquah Direct Connector	\$265	• Builds a new flyover ramp between the express toll lanes on I-405 and the HOV lanes on I-90.
			• The ramp would connect Bellevue to Issaquah.

G. SR 520/I-405 Interchange and SR 520/124th Ave NE Interchange - \$550 million

Benefits	SR 520 / 124th Ave NE New Interchange	\$235	• Rebuilds the SR 520/124th Ave NE interchange to Master Plan configuration
• Benefit/Cost: 1.6			
• Reduces delay by 24,000 vehicle hours daily or \$136 M in annual travel time savings. Provides direct connection between I-405 and SR 520 and eliminates weaving in the general purpose lanes.	I-405 / SR 520 Direct Connectors	\$315	• Builds flyover ramps connecting the express toll lanes on I-405 to the HOV lane on SR 520. Ramps will connect Bellevue to Redmond traffic.

Funding needed to complete the 40 mile system

Cost of project elements



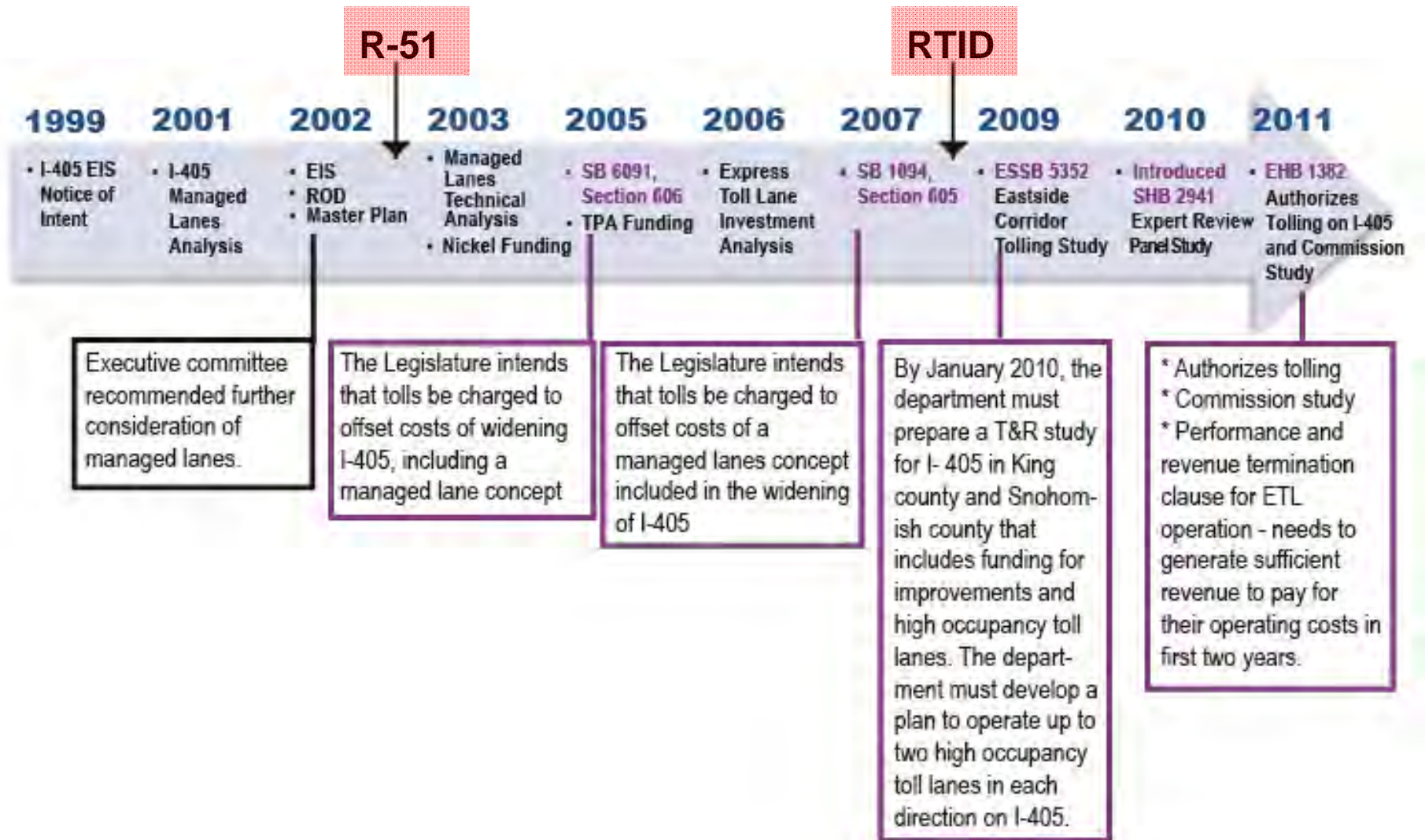
WSDOT Improvements

Renton to Bellevue, reduced scope - One lane between NE 6 th Street and SR 167 (accommodates N. 8 th)	\$675 m
I-405, 112 th Ave. SE to I-90 auxiliary lanes	\$175 m
NE 6 th St. Extension	\$40 m
I-405/SR 167 Direct Connector	\$285 m
Total cost	\$1,175 m

Other Agency Improvements

N. 8 th Street Direct Access (Sound Transit)	\$78 m
NE 6 th St. Extension (City of Bellevue)	\$60 m

Legislative Direction Funding Challenges

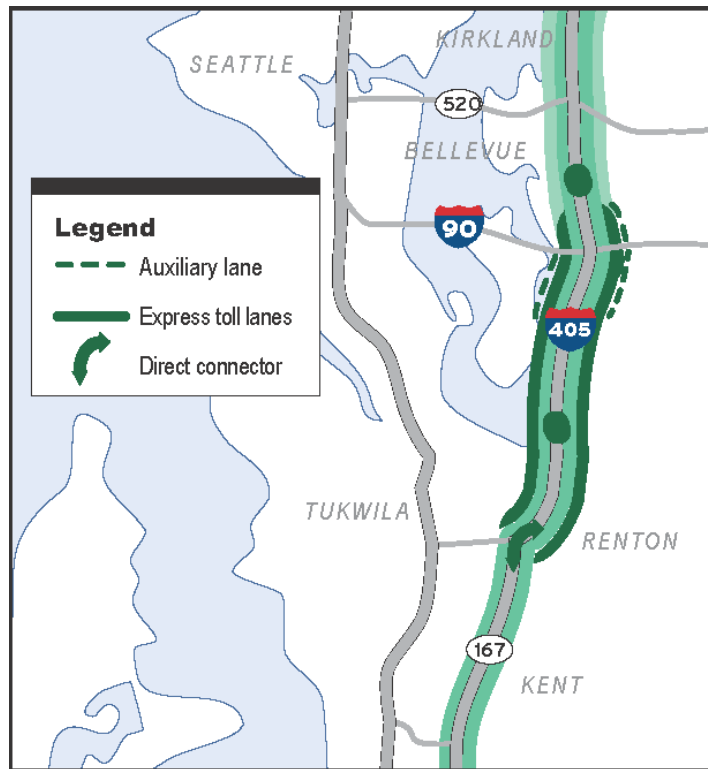


Funding and Phasing

- Funding assumption to date has been to combine traditional revenue sources with financing from 40-mile system future toll revenues.
- Traditional Revenue Source funding
 - High - \$1,175
 - Medium - \$960
 - Low - \$675
- Completing the 40-mile system
 - Pay-as-you-go
 - Finance from toll revenue

High traditional funding - \$1,175 m

\$0 needed from toll revenue

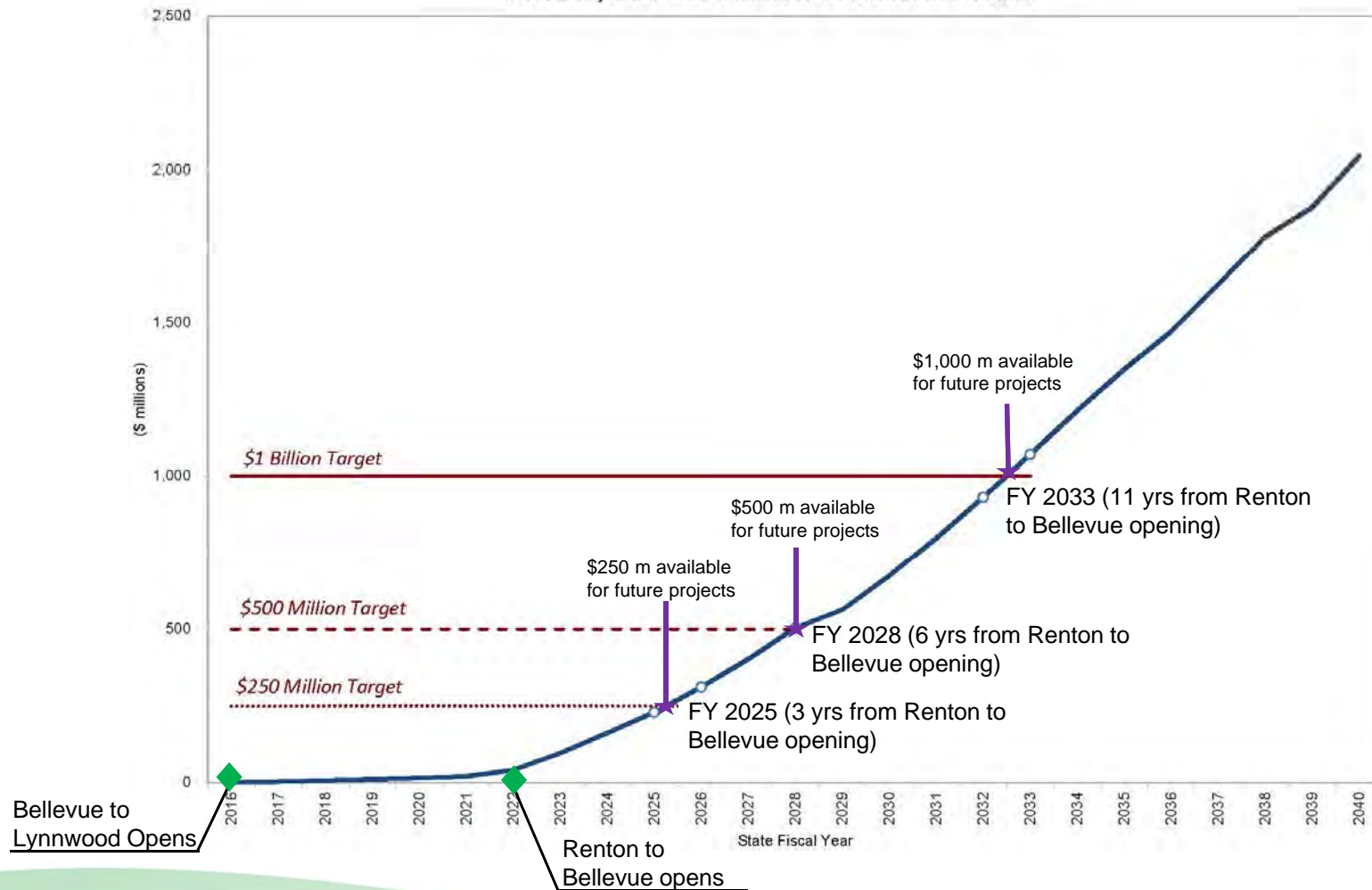


- Traditional revenue resources (gas tax) fund entire 40-mile system (\$1,175 m)
 - \$0 needed from toll revenue.
 - All future toll revenue used for other corridor priority projects, operations, and preservation.

Cumulative Net Revenue

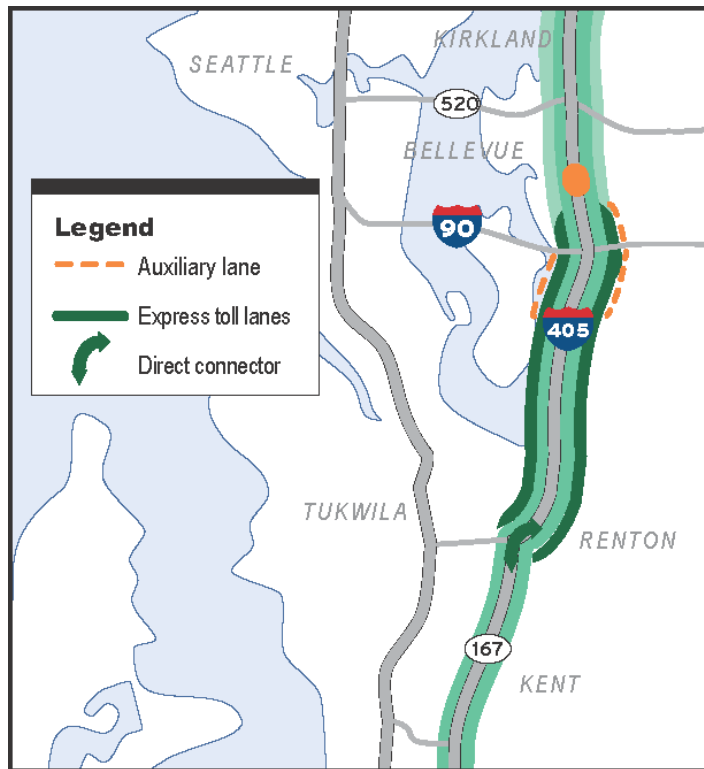
40-mile system funded and built

Scenario D (3+ HOVs Exempt, Photo Tolling), S. End Start in 2022
Preliminary Draft - Cumulative Net Toll Revenue After R&R



Medium traditional funding - \$960 m

\$215 m needed from toll revenue

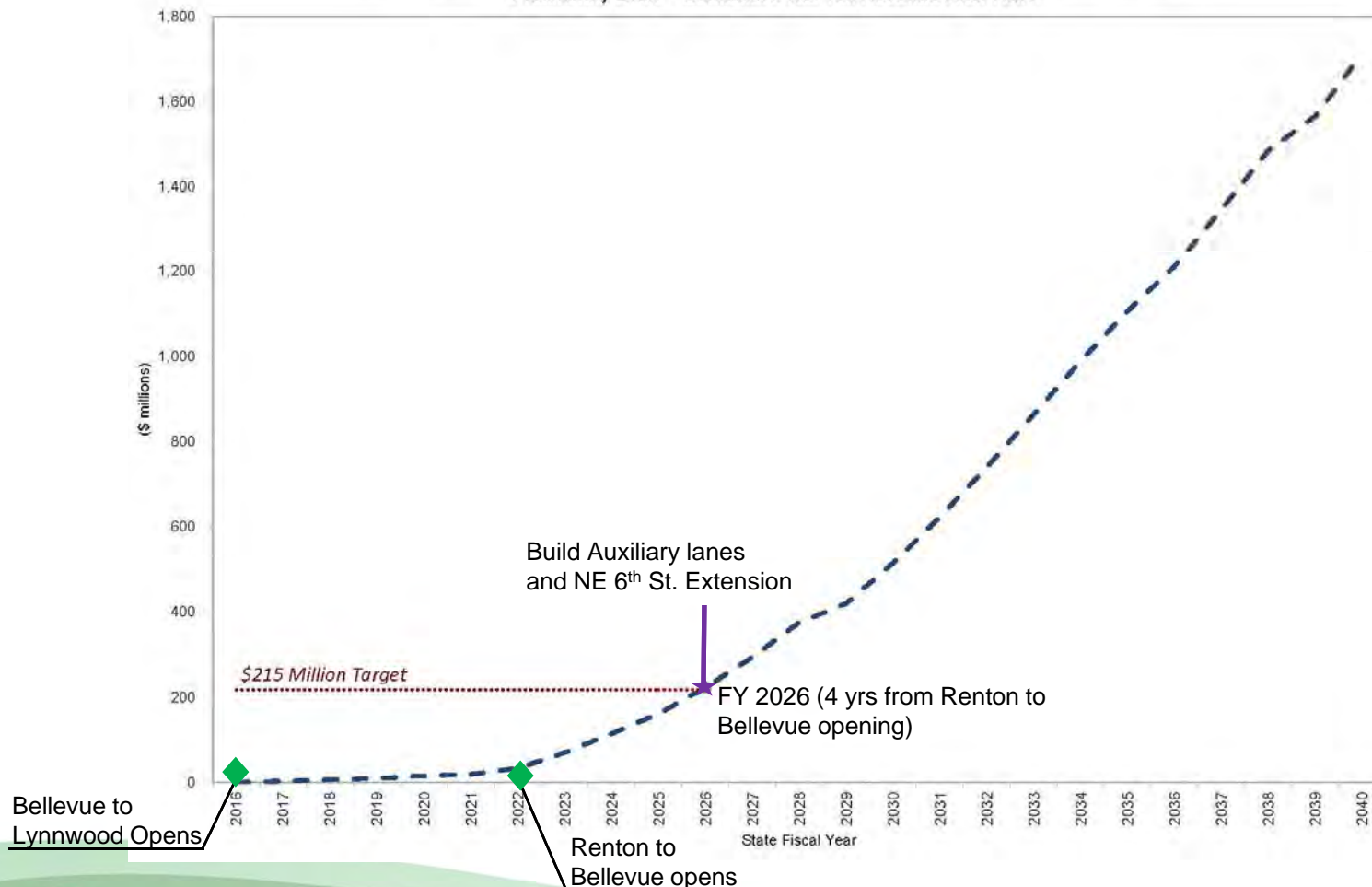


- Traditional revenue resources fund reduced scope Renton to Bellevue widening and I-405/SR 167 Direct Connector (\$960 m)
 - Use toll revenue financing to complete 40-mile system (\$215 m needed)
 - or
 - Use pay-as-you-go to complete 40-mile system (\$215 m needed)

Cumulative Net Revenue

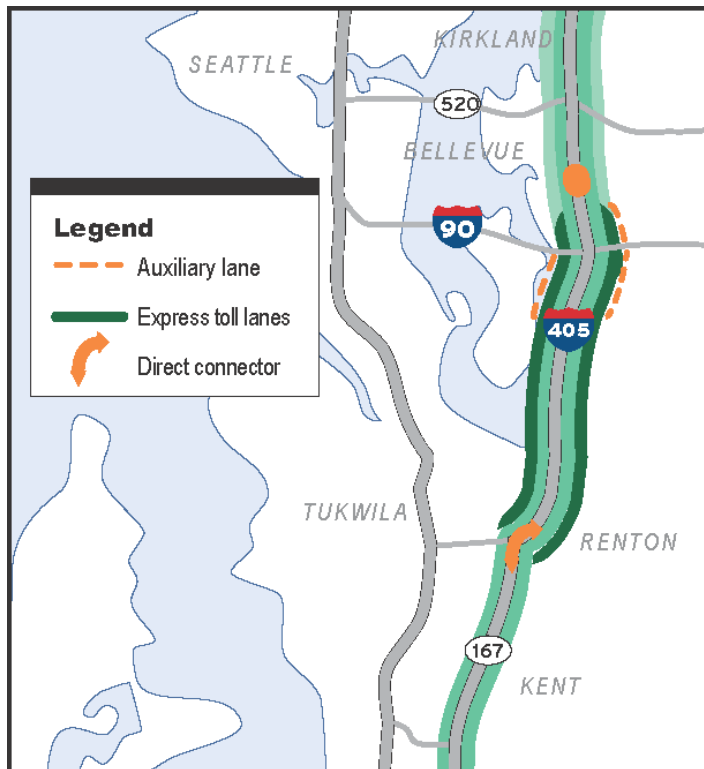
Reduced Scope Renton to Bellevue and I-405/SR 167 Direct Connector funded and built

Scenario D-1 Slim With Fly-Over (3+ HOVs Exempt, Photo Tolling), S. End Start in 2022
Preliminary Draft - Cumulative Net Toll Revenue After R&R



Low traditional funding - \$675 m

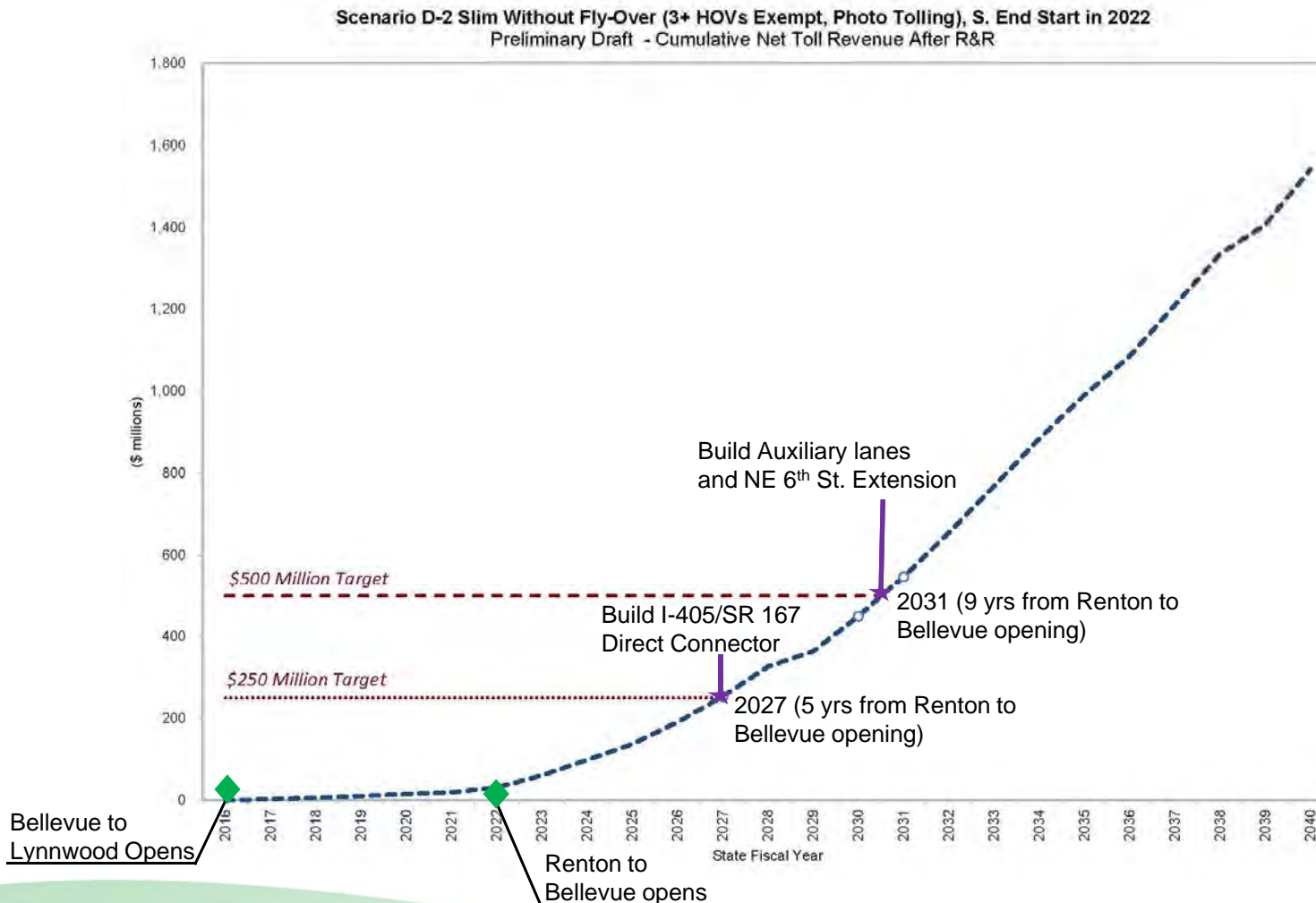
\$500 m needed from toll revenue



- Traditional revenue resources fund reduced scope Renton to Bellevue (\$675 m)
 - Use toll revenue financing to complete 40-mile system (\$500 m)
- or
- Use pay-as-you-go to complete 40-mile system (\$500 m)

Cumulative Net Revenue

Reduced Scope Renton to Bellevue funded and built



Carpool Policy Summary




































Kim Henry

I-405/SR 167 Program Director, WSDOT



Washington State
Department of Transportation

Comparison of Scenarios- Meeting 2, Feb. 27, 2013

 Good/ Easy  Ok/ Somewhat easy/hard  Poor/ Hard	A.  Carpool Free	B.  Carpool Discount	C.  Peak Free Off-Peak Free	D.  Carpool Free
System reliability/ Operations				
Toll Rates/Pricing				
Initial Net Revenue				
Public acceptance				
Usability				
Enforcement				
Regional operations/Future decision				

Our direction from RCW 47.56.880

(as amended by EHB 1382 in 2011)

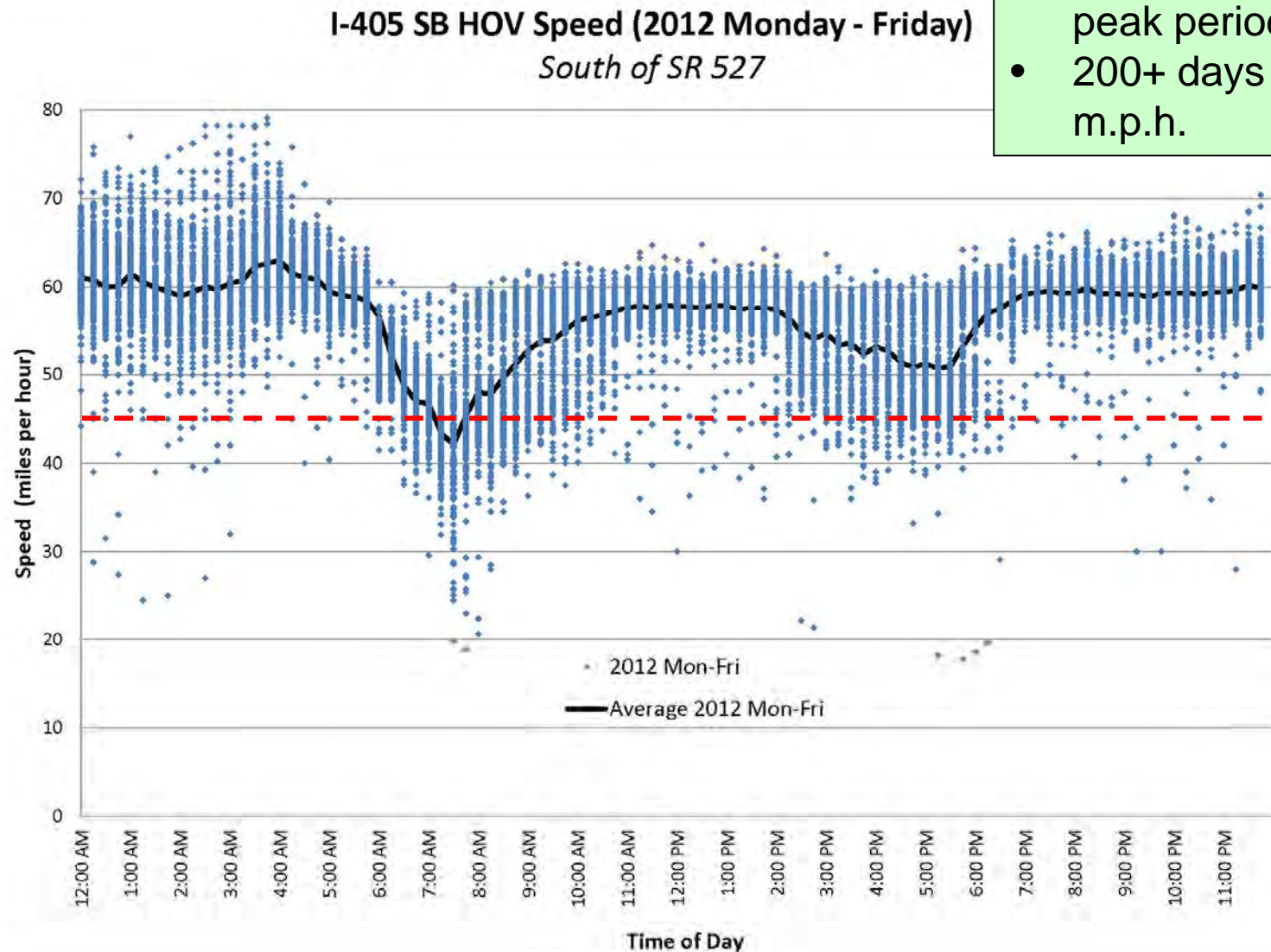
(4) The department shall monitor the express toll lanes project and shall annually report to the transportation commission and the legislature on the impacts from the project on the following performance measures:

- (a) Whether the express toll lanes maintain speeds of forty-five miles per hour at least ninety percent of the time during peak periods;**
 - (b) Whether the average traffic speed changed in the general purpose lanes;
 - (c) Whether transit ridership changed;
 - (d) Whether the actual use of the express toll lanes is consistent with the projected use;
 - (e) Whether the express toll lanes generated sufficient revenue to pay for all Interstate 405 express toll lane-related operating costs;**
 - (f) Whether travel times and volumes have increased or decreased on adjacent local streets and state highways; and
 - (g) Whether the actual gross revenues are consistent with projected gross revenues as identified in the fiscal note for Engrossed House Bill No. 1382 distributed by the office of financial management on March 15, 2011.
- (5) If after two years of operation of the express toll lanes on Interstate 405 performance measures listed in subsection (4)(a) and (e) of this section are not being met, the express toll lanes project must be terminated as soon as practicable.**

System reliability today – I-405

Performance issues

- Carpool lane speed degradation in both peak periods
- 200+ days below 45 m.p.h.



Early Year Net Revenue Projections

Millions of Dollars — Assumes Renton to Bellevue Opens 1/1/2022

Fiscal Year	Scenario A — 2+ Carpool Free Photo Tolling*				Scenario B — \$1.00 Carpool Discount*				Scenario B-2 — \$0.50 Carpool Discount Photo Tolling*			
	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)
2016	2.8	2.6	(5.0)	(2.4)	3.9	3.3	(6.2)	(2.8)	6.9	6.4	(5.9)	0.4
2017	4.7	4.3	(6.4)	(2.1)	5.3	4.5	(6.9)	(2.4)	9.3	8.5	(6.7)	1.8
2018	5.6	5.2	(7.1)	(2.0)	6.3	5.3	(7.4)	(2.1)	11.2	10.3	(7.6)	2.7
2019	6.1	5.6	(7.3)	(1.7)	7.0	6.0	(7.8)	(1.8)	13.5	12.5	(8.5)	4.0
2020	6.6	6.1	(7.6)	(1.5)	7.9	6.7	(8.3)	(1.6)	16.3	15.0	(9.6)	5.4
2021	7.2	6.6	(8.0)	(1.4)	8.9	7.5	(9.0)	(1.5)	19.6	18.0	(11.1)	7.0
2022	22.0	20.2	(19.4)	0.9	35.7	30.4	(19.1)	11.3	46.5	42.7	(22.5)	20.2
2023	44.1	40.5	(27.5)	13.0	77.7	66.0	(25.9)	40.1	88.4	81.3	(30.5)	50.8

Fiscal Year	Scenario C — 2+ Carpool Free Off-Peak 3+ Carpool Free Peak Photo Tolling*				Scenario D — 3+ Carpool Free Photo Tolling*				Scenario F — 3+ Carpool Free (WSTC Independent Forecast)†			
	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)	Potential Gross Toll Revenue ¹	Adjusted Gross Toll Revenue ²	Less: Operations & Maintenance Costs ³	Net Toll Revenue (before R&R)
2016	4.9	4.5	(5.0)	(0.5)	5.3	4.9	(4.6)	0.3	6.3	5.4	(3.9)	1.4
2017	8.2	7.6	(6.4)	1.2	9.0	8.3	(5.8)	2.5	8.7	7.4	(4.0)	3.3
2018	9.9	9.1	(7.1)	2.1	10.8	9.9	(6.4)	3.5	11.9	10.1	(4.4)	5.7
2019	10.8	10.0	(7.2)	2.8	11.7	10.8	(6.5)	4.3	13.8	11.7	(4.7)	7.0
2020	11.8	10.8	(7.4)	3.4	12.6	11.6	(6.7)	4.9	15.7	13.3	(5.1)	8.3
2021	12.8	11.7	(7.8)	3.9	13.6	12.5	(7.1)	5.5	17.7	15.1	(5.6)	9.5
2022	40.8	37.5	(19.8)	17.7	44.2	40.5	(19.3)	21.2	54.9	46.7	(20.9)	25.8
2023	83.7	76.9	(28.7)	48.2	91.1	83.7	(28.3)	55.4	101.8	86.5	(23.0)	63.5

NOTES:

* CDM Smith traffic and revenue projections.

† Cambridge Systematics "50th Percentile" traffic and revenue projections.

¹ Year of collection dollars.

² Adjusted for potential uncollectible revenue.













































³ Includes facility O&M costs starting in FY 2022, plus toll collection costs and credit card fees in all years.

Revised 9/18/13

○ Meets revenue requirement in EHB 1382

○ Does not meet EHB 1382 revenue requirement

Comparison of Scenarios- Updated Meeting #3, 9/19/13

 Good/ Easy  Ok/ Somewhat easy/hard  Poor/ Hard	A.  Carpool Free	B.  Carpool Discount 	C.  Peak Free  Off-Peak Free	D.  Carpool Free
System reliability/ Operations		\$1.00  \$0.50 		
Toll Rates/Pricing		 		
Initial Net Revenue		 		
Public acceptance		 		
Usability		 		
Enforcement		 		
Regional operations/Future decision		 		

EAG Comments



EAG Discussion

- Carpool Policy
 - What do you think of the three viable scenarios?
 - What are your findings?
 - Can we work towards consensus?
- Funding and Phasing
 - What do you think of the funding packages?
 - What are your thoughts on pay-as-you-go and/or financing?

Public Comment



Wrap Up and Next Steps



Next steps



More information:

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